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ALIGNMENTS

Human mature erythropoietin receptor EPOR extracellular domain #2

21-DEC-2000 (first entry)

AAB21686;

AAB21686 standard;

peptide;

211 AA

RESULT AAB21686

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X PTTTT
     Screening for ligand analogs and agents which modulate ligand-receptor binding, comprises adding a test ligand to a non-naturally occurring cell surface receptor analog -
                                          WPI;
                                                           Luo
                                                                                             11-FEB-1999;
29-APR-1999;
                                                                                                                        11-FEB-2000; 2000WO-US03665.
                                                                                                                                          17-AUG-2000
                                                                                                                                                          WO200047612-A2.
                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                            protein design automation; PDA
                                                                                                                                                                                                     Ligand; cell surface receptor; erythropoietin; EPOR; human;
                                                                             (XENC-) XENCOR INC.
                                                           Ρ,
                                         2000-549135/50.
                                                           Dahiyat B;
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99US-0131674
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audiog, comprising adding a candidate ligand to a non-naturally cell surface receptor analog e.g. erythropoietin
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                                                                                                                         Example 1; Fig
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29-APR-1999;
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erythropoietin receptor (EPOR),

occurring

The present sequence is truncated human EpoR (erythropoietin receptor). Transfection of constitutively active EpoR(t439) by electroporation into a cytokine-dependent cell line supports cell population expansion in the absence of exogenous cytokines. Mutant human EpoR is used in treatment of disorders related to inadequate EpoR signalling. The transfected cells

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                                                                                                                                                                                                                                                                                             mutant human EpoR; E;
sickle cell anaemia;
                                                                                                                                                                                                                                                                                                                                                    07-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                         AAY44622 standard; Protein; 438
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25-JAN-1999;
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                                                                                                                                                                                                                                                                                            man EpoR; erythropoietin receptor; hypersensitive EpoR(t439);
    EpoR; EpoR signalling; cancer; infectious disease; HIV;
    anaemia; cytostatic; antimicrobial; antiviral;
                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                   production
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99CA-2260332
                                                                                                                                                                                                             99WO-CA00606
                                                                                                                                                                                                                                                                                                                                  EpoR(t439).
                                                                                                                                                                                                                                                                                     anti-anaemic.
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Chimeric
Recombinant immunogen corresp. to dimeric form of a receptor - used for generating antibodies able to act as receptor agonists, esp. of erythropoletin receptor for treating anaemia
                                                                                                                                                                                                                                                                                                                                                                                                   07-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Receptor agonist; antibody; erythropoietin receptor; EpoR; immunogen; antigen; metallothionein; promoter; IgGl; Fc;
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domain"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            comprises the human erythropoietin receptor (EpoR) extracellular domain fused (via a Factor Xa cleavage sequence) to the Fc portion of human IgG1. It can be expressed e.g. in transfected Drosophila S2 cells upon induction with copper sulphate. The cells secrete EpoRFc as a dimeric molecule due to the affinity of the Fc moiety for itself. The dimeric receptor can be used as an immunogen to generate antibodies (monoclonal, polyclonal, chimeric, humanised) able to act as EcoR agonists for use in treatment of anaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     erythropoietin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Site specific label; detection; interaction screening; transglutaminase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q-tagged erythropoietin (EPO) receptor protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB13012 standard;
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                                                                                                                                                                                                       WPI; 2000-499222/44.
                                                                                                                                                                                                                                                                                                                                                     22-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                   20-JAN-2000; 2000WO-US01481
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200043492-A2
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                                                                                                                                                                                                                                                                                                    (SMIK)
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93.8%; Pred. No. 5.96
tive 11; Mismatches
                                                                                                                                                                                                                                                     Meek TD,
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5.9e-106;
nes 2;
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0;

Screening for a candidate compound for use in bioassays comprises contacting the candidate molecule with a labelled modified protein detecting the label to identify interaction of the two molecules

fied protein molecules -

and

This invention relates to methods for

the site specific modification

of.

Example 4; Page 26; 49pp; English

0;

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RESULT AARO6512
ID AARO6512
ID AARO
XX AARO
XX AARO
DT 04-J
XX EFO
XX EFO
XX HOMC
XX WO9(
XX O9-J
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Best Local :
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The sequence was deduced from DNA obtd. from a clone isolated a commercially available human geenomic cDNA library in phage Lambda Fix (Stratagene). The sequence encodes a type I transmembrane protein with binding affinity for EPO. The gene and
                                                                                                                                                                 Erythropoietin and systems to
                                                                                                                                                                                                                                                                                                                                                         (GENE-)
                                                                                                                     Disclosure; Fig
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DB; AAQ05748.
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                                                                                                                                                                                                                                                                                                          Wong
                                                                                                                                                                 receptor and gene control and study
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                                                                                                                     English.
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Pred. No. 6.1e-106;
1; Mismatches 2;
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    used for developing 
erythropoiesis.

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Best Local S
Matches 198
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expression as a cleavage site.
                   New pure human erythropoietin receptor fragment
                                     N-PSDB; AAQ82990
                                                                                                                                                                                          Misc-difference
                                                                                                                                                                                                            Misc-difference
                                                                                                                                                                                                                                                           Key
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                                                                                                      16-AUG-1993;
                                                                                                                        15-AUG-1994;
                                                                                                                                                              W09505469-A
                                                                                                                                                                                                                                                 Domain
                                                                                                                                                                                                                                                                                              Erythropoietin receptor; extracellular
                                                                                                                                            23-FEB-1995
                                                                                                                                                                                                                                                                                                                 Human erythropoietin receptor
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         fusion
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9..83
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Pred. No. 6.2e-106;
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                                                                                                                                                                                                                      domain"
                                                                                                                                                                                AAQ82992 specific
                                                                                                                                                                                                  AAQ82991 specific site"
         proteolytic
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                                                                                                                                                                                 site
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Best Local Similarity
                                                03-FEB-1989;
25-MAR-1991;
10-JUN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The full-length erythropoietin receptor (EPO-R) is given. Extracellular domains are expressed from vector plasmid pGEX-2T as fusion proteins with glutathione-S-transferase. The domains are used for investigating the structure of the EPD-R and for identifying factors involved in regulating differentiation and proliferation mechanisms in erythroid progenitor cells. They can also be used for identifying and quantitating EPO and EPO-R as well as in understanding haematopoietic malignancy and some cardiovascular system disorders.
                                                                                                                                                                         US5378808-A
                                                                                                                                                                                                                          Domain
                                                                                                              03-FEB-1989;
                                                                                                                                             03-JAN-1995
                                                                                                                                                                                                                                                                                     Protein
                                                                                                                                                                                                                                                                                                                                                                                             Erythropoietin
                                                                                                                                                                                                                                                                                                                                                                                                                         Human erythropoietin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR69503 standard;
                                                                                                                                                                                                                                                        Modified-site
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                 (GEMY)
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                   GENETICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                               89US-0306503.
91US-0678877.
93US-0075069.
                                                                                                                                                                                                                                                                                                                                                                                        receptor; anemia therapy; diagnostic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA;
                                                                                                             89US-0306503
                                                                                                                                                                                                                                                    /note= "signal peptide"
25..508
/note= "mature protein"
76..79
                                                                                                                                                                                                                       /note= "N-glycosylation site" 251..272
                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
1..24
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Pred. No. 6.2e-106;
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ID AAR4
XX AAR4
AC AA
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03-FEB-1989;
25-MAR-1991;
                                             03-FEB-1989;
                                                                            11-JAN-1994
                                                                                                                                                      Region
                                                                                                                                                                                     Protein
                                                                                                                                                                                                                                                                                                                              Human
                                                                                                                                                                                                                                                                                                                                                             24-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                          AAR47518;
                                                                                                          US5278065-A
                                                                                                                                                                                                                    Peptide
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Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                             Erythropoietin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR47518 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 2; Fig 9;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New recombinant erythropoietin receptor polypeptide(s) - used detection, purificn. and therapy and for prodn. of antibodies
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
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                                                                                                                                                                                                                                                                                                                                                                                                   EPO receptor
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                                                                                                                                                                                                                                                                                                                                                                                                                                       (first
89US-0306503
91US-0678877
                                                                                                                                                                                                                                                                                                                                                             receptor;
                                                       8905-0306503
                                                                                                                                                                                        /note= "i
251..272
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                                                                                                                                                                                                                          /note= "signal
25..508
                                                                                                                                                                                                                                                                                  Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
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93.8%;
                                                                                                                                                                                                          "mature EPO receptor"
                                                                                                                                                                      "putative transmembrane
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                                                                                                                                                                                                                                                                                                                                                               recombinant;
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; Pred. No. 6.2e-106;
11; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                508
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                                                                                                                                                                                                                                                                                                                                                               anaemia
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Best Local s
Matches 196
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CHIL-)
                                                                                          Misc-difference
                                                                                                                                                                                                                                                                                                                        sickle
                                                                                                                                                                                                                                                                                                                                                                                                   Truncated human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAY44623 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mouse erythroleukaemia (MEL) cells were used to construct a cDNA library. The cDNA was used to transfect COS-1 cells and these were
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Fig 9; 24pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB;
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                                                                                                                                                                                                         Ното
                                                                                                                                                                                                                                                                            immunostimulant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAY44623;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         pref. used for treating anaemias, primary proliferative polycythemia secondary polycythemia.
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) GENETICS INST INC.
) WHITEHEAD INST BIOMEDICAL
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                                                                                                                                                                                                                                                                                                            ted human EpoR; erythropoietin receptor; hypersensitive EpoR(t439);
human EpoR; EpoR signalling; cancer; infectious disease; HIV;
cell anaemia; cytostatic; antimicrobial; antiviral;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
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                                                                                       Location/Qualifiers
                                               /note-
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                                           "Wild type Arg substituted by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wong
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is R154C truncated human EpoR (erythropoietin receptor). Transfection of constitutively active EpoR(t439; R154C) electroporation into a cytokine-dependent cell line supports cell population expansion in the absence of exogenous cytokines. Mutant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EpoR is used in treatment of disorders related to inadequate EpoR signalling. The transfected cells may also used in gene therapy transcer, infectious diseases (e.g. HIV), sickle cell anaemia, and conditions related to abnormal expression of erythropoietin.
                                                                                        Mus musculus
                                                                                                                                     antigen;
                                                                                                                                                                                                        Mouse
                                                                                                                                                                                                                                                       19-OCT-1994
                                                                                                                                                                                                                                                                                                                                                  AAR50326 standard;
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25-JAN-1999;
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                                                                                                                                                          soluble;
                                                                                                                                     diagnostic agent;
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                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                        EPO receptor
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99CA-2260332
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                                             Location/Qualifiers
                                                                                                                                     erythropoietin; EPO; receptor protein; sEPO-R;
tic agent; biochemical reagent.
                                                                                                                                                                                                                                                                                                                                                  Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95.8%;
93.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       useful for the efficient culture of of hemoglobin -
                                                                                                                                                                                                        protein fragment.
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11; Mismatches
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Pred. No. 3
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8.8e-105;
les 3;
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This sequence represents a fragment of the murine soluble erythropoietin (EPO) receptor protein (SEPO-R). This protein is able to bind to EPO and has antigenicity as an EPO receptor. The molecular wieght of the full length protein is pref 33 or 29 kD. The protein is useful as a drug, as a diagnostic agent and a blochemical reagent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Soluble erythropoietin receptor protein - SEPO-R, useful as diagnostic reagent
                                                                                                                    Erythropoietin; Diamond Blackfan anaemia; polycythemia
                                                                                                                                          EPO receptor sequence deduced from DNA of clone 190
                                                                                                                                                                 04-JAN-1991
                                                                                                                                                                                                             AAR06511 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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           Domain
                                            Domain
                                                                                                 Mus musculus
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         /note=EPO binding region 248..271
                                                                          Location/Qualifiers
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                                /label-extracellular domain
                                                     /label=signal peptide
/label=transmembrane domain
                                                                                                                                                                                                             protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      79.2%; Score 869.5; DB 1 77.7%; Pred. No. 1.1e-85;
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RESULT 13
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                        cDNA library prepd. from uninduced murine erythroleukemia cells. It is a type I transmembrane protein with binding affinity for EPO. The gene and recombinant EPO receptor produced on expression of the DNA are used to develop reagents and systems to control and study erythropolesis. It is believed that the EPO receptor is dysfunctional in individuals with Diamond Blackfan anaemia, and may be hyperactive in polycythemia vera.

See also AAR06512 (human EPO receptor).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1990-260931/34.
N-PSDB; AAQ05747.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Erythropoietin receptor and gene - used for developing reagents and systems to control and study erythropoiesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                D'andrea A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-FEB-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequence was deduced from DNA from a clone isolated from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Fig 1; 53pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-FEB-1989;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Domain
                                                 24-JUN-1994
                                                                        AAR47517;
                                                                                              AAR47517 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GENE-) GENETICS INST INC (WHIT-) WHITEHEAD INST.
                        MEL EPO receptor
                                                                                                                                                          213
                                                                                                                                                                       181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
                                                                                                                                                                                                           153
                                                                                                                                                                                                                       121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                         34 kfeskaallasrgseellcftqrledlvcfweeaassgm-dfnysfsyqlegesrkscsl
                                                                                                                                                                                                                                                                                                                   1 KFESKAALLAARGPEELLCTTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL
                                                                                                                                                                                                                                                        trytfavrarmaepsfsgfwsawsepasllt
                                                                                                                                                                                                          rraeegshvvlrwlpppgapmtthiryevdvsagnraggtgrvevlegrtecvlsnlrgg
                                                                                                                                                                                                                                                                                                                                                         164;
                                                                                                                                                                                                                                                                                                                                                        Similarity 77.7
64; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                     507
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                                                (first
                                                                                                                                                                                                                                                                                                                                                                                                                     AA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            89US-0306503
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182..184
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/label=intracellular domain
75..77
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                                                                                                Protein;
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77.7%;
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                                                                                                                                                                                                                                                                                                                                                        Score 869.5; DB 1
Pred. No. 2.5e-85;
22; Mismatches 24
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                                                                                                                                                                                                                                                                                                                                                                               DB 11;
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                                                                                                                                                                                                                                                                                                            92
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Erythropoietin receptor; recombinant; murine; anaemia.

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Query Match
Best Local :
                                                                                                                                                                    Matches
                                                                                                                                                                                                                                       Mouse erythroleukaemia (MEL) cells were used to construct a cDNA library. The cDNA was used to transfect COS-1 cells and these were screened for radiolodinated erythropoietin (EPO) binding to isolate cDNA encoding the EPO receptor. The cDNA may be used to isolate the EPO receptor from other sources and to study, treat or diagnose disorders in which the EPO receptor is dysfunctional. The EPO receptor may also be used to raise antibodied or for treating hypersensitivity to EPO or who have elevated levels of EPO. The pord. is pref. used for treating anaemias, primary proliferative polycythemia and secondary polycythemia.
                                                                                                                                                                                                                                                                                                                                                                                     Recombinant DNA encoding erythropoietin receptor - used to develop prods. for study, treatment or diagnosis of disorders which receptor is dysfunctional
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CHIL-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-FEB-1989;
25-MAR-1991;
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                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-FEB-1989;
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                                                                                                                                                                                                                      Sequence
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 213
                                          153
                                                             121
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                                                                                                                                                                             Local Similarity
                                                                                                                        trytfavrarmaepsfsgfwsawsepasllt
                                                RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR
                                                                                                   HQAPTARGAIRFWCSLPTADTSSFYPLELRLTAASGAPRFHRVIHINEVYLLDAPVGLVA
                    TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
                                1994-025409/03
                                                                                                                                                                    164;
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GENETICS INST INC.
WHITEHEAD INST BIOMEDICAL
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91US-0678877.
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25..507
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77.78;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "putative transmembrane region"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "potential
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "mature EPO receptor"
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                                                                                                                                                                                                                                                                                                                                                                  English.
                                                                                                                                                                   22;
                                                                                                                                                                             Pred.
                                                                                                                                                                                      Score 869.5;
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                                                                                                                                                                    Mismatches
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                                                                                                                                                                 No. 2.5e-85;
smatches 24;
 243
                                                                                                                                                                                      DB 15;
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                                                                                    Query Match
Best Local Similarity
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25-MAR-1991;
10-JUN-1993;
                                                                                                                                                  The sequence corresponds to a mouse erythropoletin receptor, including putative signal peptide and transmembrane regions, N-linked glycosylation sites. The protein is derived from me erythroleukemia cells and may be used in drug design or in
                                                                                                                                                                                                                  New recombinant erythropoletin receptor polypeptide(s) - used detection, purificn. and therapy and for prodn. of antibodies detection and therapy
                                                                                                                         Sequence
                                                                                                                                           pharmaceutical compositions
                                                                                                                                                                                                 Claim 1;
                                                                                                                                                                                                                                                       N-PSDB;
                                                                                                                                                                                                                                                                                   D'andrea A,
                                                                                                                                                                                                                                                                                                                                                            03-FEB-1989;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Erythropoietin receptor; anemia therapy; signal peptide; transmembrane region; N-linked glycosylation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mouse erythropoietin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-AUG-1995
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93
                   61
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                                               1 KFESKAALLAARGPEELLCETERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL
1995-051310/07.
                                      kfeskaallasrgseellcftqrledlvcfweeaassgm-dfnysfsyqlegesrkscsl
                                                                          164;
                                                                                                                                                                                                                                                        AAQ81891
                                                                                                                                                                                                Fig 2;
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                                                                           Conservative
                                                                                                                                                                                                                                                                                    Jones SS,
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91US-0678877.
93US-0075069.
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75..77
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25..507
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250..271
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                                                                                    79.28;
77.78;
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                                                                                                                                                                                                                                                                                                                                                                                                                                    "transmembrane region"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "signal peptide"
                                                                                                                                                                                                                                                                                   Wong
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                                                                                    Score 869.5; DB 1
Pred. No. 2.5e-85;
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                                                                           Mismatches
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                                                                                              Length
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RESULT 15
AAR50327
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                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 78.6%; Score 862.5; DB 15; Length 507; Best Local Similarity 77.3%; Pred. No. 1.4e-84; Matches 163; Conservative 22; Mismatches 25; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This sequence represents the murine soluble erythropoietin (EPO) receptor protein (SEPO-R). This protein is able to bind to EPO and has antigenicity as an EPO receptor. The molecular wieght of the full length protein is pref 33 or 29 kD. The protein is useful as a drug, as a diagnostic agent and a biochemical reagent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Soluble erythropoietin receptor protein - and DNA coding SEPO-R, useful as diagnostic reagent
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1994-094847/12.
N-PSDB; AAQ44854.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mouse soluble EPO receptor protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-OCT-1994 (first entry)
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                                                                                                                                                                                    TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
                                                                                                            RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
                                                                             rraeegshvvlrwlpppgapmtthiryevdvsagnraggtqrvevlegptecvlsnlrgg 212
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      507 AA;
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Db 213 trytfavrarmaepsfsgfwsawsepasllt 243

Search completed: August 28, 2002, 17:31:06 Job time: 1453 sec